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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARAN, JOHN T

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,024

Applicant(s)

HOUSTON ET AL.

Examiner

John T. Haran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 7/9/03 has been considered by the examiner.

Specification

2. The disclosure is objected to because of the following informalities: the specification should be amended to indicate that the parent application is now U.S. Patent 6,596,393.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the metes and bounds of the claims cannot be determined using the terms "ethylene based" or "polypropylene based". It is suggested to delete the use of the word "based".

Claim 3 recites the limitation "the heating step". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 4-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farfoud et al (U.S. Patent 5,777,535) in view of Ciuba et al (U.S. Patent 4,675,215).

Farfoud et al is directed to a method of making a corrosion resistant coaxial cable wherein a dielectric layer is applied around a center conductor, an aluminum-polypropylene-aluminum tape is wrapped around the dielectric, an outer metallic conductor shield is placed around the tape either in the form of a wire braid or solid, and a corrosion inhibiting composition is applied to the outer conductor (Column 1, line 35 to Column 2, line 12). Farfoud is silent towards the center conductor being advanced along a path during assembly, however such is notoriously well known and conventional in the cable manufacturing art that it would have been obvious to one of ordinary skill in the art at the time the invention was made to advance the center conductor along a predetermined path for the application of the various layers to form the coaxial cable in the method of Farfoud et al.

Farfoud et al is also silent towards the specifics of the corrosion inhibiting compound.

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Ciuba et al teaches a corrosion inhibition composition for use on metal surfaces to prevent corrosion, which includes a corrosion inhibiting compound such as calcium sulfonate dispersed in an oil and having a glycol solvent such as ethylene glycol ethers or polypropylene glycol ethers (Abstract, Column 2, lines 3-5; Column 3, lines 23-47 and lines 64-65; Column 4, lines 35-37).

One skilled in the art would have readily appreciated applying a known corrosion inhibiting composition to the metallic outer conductor in the method of Farfoud et al, such as the composition taught in Ciuba et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a known corrosion inhibiting composition to the outer conductor in the method of Farfoud et al, such as the composition taught in Ciuba et al containing and corrosion inhibiting compound, an oil, and a glycol solvent.

Regarding claim 3, Farfoud et al teaches applying an insulation jacket and it is conventional to apply such as a hot melt extrusion and it would have been obvious to do such in Farfoud et al.

Regarding claims 4-6, Ciuba et al teaches a glycol solvent and specifically names propylene glycol methyl ether, ethylened glycol methyl ether and diethylene glycol butyl ether as examples (Column 4, lines 35-37). In addition one skilled in the art would have readily appreciated that the other listed glycols are well known and conventional and it would have been obvious to utilize such a conventional glycol as the solvent.

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Regarding claims 7-10 and 12, Ciuba et al teaches the corrosion inhibiting compound is calcium sulfonate (Column 8, line 32). In addition one skilled in the art would have readily appreciated that the other listed compounds are well known and conventional corrosion inhibiting compounds and it would have been obvious to use any of them as the corrosion inhibiting compound.

Regarding claim 11, one skilled in the art would have readily appreciated using a compound with sufficient activity to prevent corrosion as it would have been obvious to do so in the method of Farfoud et al, as modified above.

Regarding claims 13-15, Ciuba et al teaches including mineral spirits (oil) in the composition (Column 4, lines 42-59).

Regarding claims 16-18, one skilled in the art would have readily appreciated that one skilled in the art would have readily appreciated the necessary viscosity of the composition and the necessary percentage makeup of the composition in order to achieve the desired anti corrosion properties. It would have been obvious to do so in the method of Farfoud et al, as modified above.

Regarding claims 19 and 20, Ciuba teaches applying the composition by rolling, brushing, immersion or spraying (Column 8, line 67 to Column 9, line 1).

Regarding claims 21-23, as noted above, Farfoud et al teaches applying an aluminum-polypropylene-aluminum tape around the dielectric, and then forming an aluminum wire braid around the tape (Column 1, lines 55-58 and Column 2, lines 5-8).

Regarding claims 24-28, one skilled in the art would have readily appreciated that all the claimed means of applying the corrosion inhibiting coating are obvious

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alternate expedients of one another and it would have been obvious to use any of the claimed methods.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farfoud et al (U.S. Patent 5,777,535) in view of Ciuba et al (U.S. Patent 4,675,215) as applied to claim 1 above, and further in view of Stipes (U.S. Patent 6,265,667).

Farfoud and Ciuba are silent towards heating the corrosion inhibiting composition to dry it and remove the solvent and oil, however it is well known and conventional to heat a corrosion inhibiting composition to dry it and the evaporate the solvent, as shown for example in Stipes (Column 4, lines 28-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the corrosion inhibiting composition to evaporate the solvent in the method of Farfoud et al, as modified above, as is conventional in the art as exemplified in Stipes.

8. Claims 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farfoud et al (U.S. Patent 5,777,535) in view of Ciuba et al (U.S. Patent 4,675,215) as applied to claims 1 and 4-28 above, and further in view of Blew (U.S. Patent 5,254,188).

Regarding claim 29, Farfoud et al is silent towards helically wrapping wires around the tape rather than as a wire braid, however wire braids and helically wrapping wires are obvious alternate expedients as shown for example in Blew (See Figures 1 and 4; Column 2, lines 47-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to helically wrap the wires around the tape rather

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than applying a wire braid in the method of Farfoud et al, as modified above, as they are obvious alternate expedients as taught in Blew.

Regarding claims 30-34, one skilled in the art would have readily appreciated that all the claimed means of applying the corrosion inhibiting coating are obvious alternate expedients of one another and it would have been obvious to use any of the claimed methods.

9. Claims 3 and 35-36 rejected under 35 U.S.C. 103(a) as being unpatentable over Farfoud et al (U.S. Patent 5,777,535) in view of Ciuba et al (U.S. Patent 4,675,215) as applied to claims 1 and 19-20 above, and further in view of Hillburn (U.S. Patent 5,521,331).

Regarding claims 35 and 36, Farfoud et al teaches that the outer conductor shield can be a solid metal (Column 2, lines 9-11), but is silent towards longitudinally butt welding an aluminum strip as an outer conductor shield, however such is well known and conventional, as shown for example in Hillburn (Column 5, lines 43-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a solid outer conductor shield in a conventional manner, such as longitudinally butt welding an aluminum strip, in the method of Farfoud et al, as modified above.

Regarding claim 3, it is well known and conventional to have an outer insulation over an outer conductor, as shown for example in Hillburn (Column 5, lines 52-55). Furthermore it is well known and conventional to apply such insulations as a hot melt

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extrusion and it would have been obvious to do such in the method of Farfoud et al, as modified above.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John T. Haran whose telephone number is (571) 272-1217. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John T. Haran
Examiner
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